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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,976	09/26/2003	Philippe Leduc	FR-AM 1891	8873
7982	7590	03/28/2005	EXAMINER	
EDGAR SPIELMAN			NGUYEN, NGOC YEN M	
ALBEMARLE CORPORATION			ART UNIT	
451 FLORIDA BLVD.			PAPER NUMBER	
BATON ROUGE, LA 70801			1754	

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,976

Applicant(s)

LEDUC, PHILIPPE

Examiner

Ngoc-Yen M. Nguyen

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION

The disclosure is objected to because of the following informalities: page 11, line 13, "valeric acid" appears to be misspelled.

Appropriate correction is required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, there is no clear antecedent basis for "the light organic compounds" as required in a); "the light organoamine compounds" in b).

In claim 3, the limitation of "one or more treatment(s) a), b), c) or d) in the order a), b), c), d)" is indefinite because if there was only one treatment used, how can it be in the order "a), b), c), d)". It is unclear if more than one treatment is required in claim 3.

Claims 10-11, when only treatment d) in claim 1 is carried out (it should be noted that claim 1 only requires that "one or more" of the treatment is selected), the product would be a solid (note the washing and drying steps of the cake), thus, there would be no antecedent basis for "said treated aqueous bromide-containing solution" as required in the instant claims 10-11.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foster et al (3,882,181).

Foster '181 discloses a process for separating hexamethylenediamine-dihydrobromide from ammonium bromide which comprises contacting a mixture thereof, with a solvent comprising n-butanol containing a modifier and removing the solvent having dissolved therein the hexamethylenediaminedihydrobromide from the insoluble residue of ammonium bromide (note claim 3).

The organic solvent can be alcohols, such as butanols, propanols (note column 3, lines 33-40), nitriles and nitrocompounds such as acetonitrile (note column 3, lines 41-45), ethers, or halogenated compounds (note column 2, lines 46-61). It would have been obvious to one skilled in the art to select any alcohol, nitrile, ether or halogenated compound as the solvent through routine experimentation so the process of Foster '181 can be effectively carried out.

Foster '181 does not specifically disclose the steps of washing and drying the insoluble residue of ammonium bromide, however, since ammonium bromide is a known and useful product in the art, it would have been obvious to one skilled in the art to wash and dry in order to recover the ammonium bromide product.

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Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frazee et al (3,442,614).

Frazee '614 discloses that sodium bromide can be used to produce bromine by reacting chlorine (note reaction in column 3). Even though in the preferred embodiment, Frazee '614 concerns with a sodium bromide solution contains amino nitrogen impurity, however, Frazee does disclose that a sodium bromide brine, impurity free is commercially available (note column 4, lines 4-5).

Thus, it would have been obvious to one of ordinary skill in the art to react an impurity-free sodium bromide brine with chlorine to form pure bromine.

For the product by process limitation, even though the impurity-free sodium brine as disclosed in Frazee '614 was not formed by the same claimed process, however, when the examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to applicant to establish that their product is patentably distinct and not the examiner to show the same process of making. *In re Brown*, 173 USPQ 685 and *In re Fessmann*, 180 USPQ 324.

Claims 7-11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter: the prior art does not suggest a method for reducing the content of organic matter and of nitrogenous products in a bromide-containing effluent by vapor entrainment of the organic compounds and/or ammonia.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc-Yen M. Nguyen whose telephone number is (571) 272-1356. The examiner is currently on Part time schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Stan Silverman can be reached on (571) 272-1358. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed (571) 272-1700.



Ngoc-Yen M. Nguyen
Primary Examiner
Art Unit 1754

nmn
March 21, 2005